

To whom it may concern:

I am including three papers written during my graduate student career. They are briefly described below.

Lovett, A., & Forbus, K. (2011). Cultural commonalities and differences in spatial problem-solving: A computational analysis. *Cognition*, 121(2), 281-287.

This is my most recent work on modeling spatial problem-solving. My model of the visual oddity task makes important predictions about cultural differences in spatial representation.

Lovett, A., Tomai, E., Forbus, K. & Usher, J. (2009). Solving geometric analogy problems through two-stage analogical mapping. *Cognitive Science* 33(7), 1192-1231.

Here, I use a similar approach to model geometric analogy. I compare the model's performance against human participants and test the model's predictions.

Lovett, A., Gentner, D., Forbus, K., & Sagi, E. (2009). Using analogical mapping to simulate time-course phenomena in perceptual similarity. *Cognitive Systems Research* 10(3): Special Issue on Analogies - Integrating Cognitive Abilities, 216-228.

Here, I look at a visual similarity task, in which participants say whether two images are the same or different. My model suggests an interaction between encoding and comparison that helps explain the time course of comparison.

Thank you,
Andrew Lovett